GUIDE TO THE ISSUES

HOUSE REPUBLICAN POLICY COMMITTEE

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COMBAT AMERICA'S CRITICAL MINERAL DEPENDENCY

Critical minerals are necessary for the modern economy, with applications in manufacturing, defense, renewable energy, advanced technology, and many other sectors. Congress must ensure that the U.S. is less dependent on foreign nations to meet its demand for these materials.

BACKGROUND

The Department of Interior finalized a list of 35 materials[1] that are considered critical for America's economic competitiveness, modernization of infrastructure, national security, and advanced technological development, including renewable energy technologies necessary for the expansion of solar, wind, energy storage, and electric vehicles. Despite the existence of substantial reserves of these resources in the United States, most critical minerals are not mined in the U.S. In fact, the U.S. has become increasingly dependent on foreign nations – China in particular – to meet demand for these essential commodities.

For example, in 2019, the United States had a 100 percent net import reliance on other nations for 17 minerals, including gallium, indium, and rare earth elements.[2] Among other uses, gallium, indium, and rareearth elements are components of smartphones, satellites, semiconductors, solar panels, and electric vehicles.[3] China was the top import source for all three of these elements.[4]

Critical minerals are required for many modern defense systems, including aerospace applications.[5] Another mineral with high relevance to our defense interests, uranium, was imported at a rate of 97 percent in 2018.[6] The world's largest uranium producer is Kazakhstan, with Russia and Uzbekistan also as major producers.[7] China is signaling an interest in the uranium market, as well, buying large mines in Namibia.[87]

Given the serious need to maintain a stable supply of critical minerals, encouraging domestic production is in the nation's best interest. Moreover, since the United States has some of the best environmental and human labor standards in the world, it is preferable–as well as safer for the supply chain–to maximize domestic production of these resources.

One major obstacle to domestic mineral development is the long, confusing, and overly burdensome permitting process in the United States. Mining projects require years of environmental studies, permitting, bonding, and stakeholder engagement, both at the state and federal level. All told, a mining project in the United States may spend 7 to 10 years waiting for final permitting approval. In comparison, countries like Canada and Australia have illustrated a capacity to follow specific permitting timelines while maintaining environmental protections. Both countries' permitting timeframes average around two years, and both nations rank as the top two countries for mining investment.

POLICY SOLUTIONS

As demand grows for renewable energy technologies, electric vehicles, and high-tech devices, such as smart

phones, the need for critical minerals will continue to increase. The United States lacks resources in many stages of the minerals supply chain, with very little mining or processing of these materials occurring domestically. Congress should:

- Streamline the federal permitting process to boost access to critical minerals in a reliable and timelymanner. The United States can promote domestic mineral independence by reducing delays and duplicative reviews while also maintaining robust environmental standards.

- Incentivize enough domestic refining capacity to meet demand. Much of what is mined in the U.S. must be shipped overseas to be refined and processed.[9] Increasing the number of refineries in the U.S.would help prevent a chokehold at the processing stage of the supply chain.

- Prioritize mineral assessments at the federal level to identify valuable deposits across the country,allowing for more efficient and targeted development. Many potential domestic mineral reserves remain undiscovered. In fact, less than 18 percent of the U.S. has been adequately geologically mapped.[10] The exploration phase of a mining project takes many years, potentially a decade or more.[11]

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[1] Final List of Critical Minerals 2018, 83 FR 23295, May 18, 2018, https://www.govinfo.gov/content/pkg/FR-2018-05-18/pdf/2018-10667.pdf.
[2] U.S. Geological Survey (USGS), *Mineral Commodity Summaries 2020 (*January 31, 2020), https://pubs.usgs.gov/periodicals/mcs2020/mcs2020.pdf.
[3] *Mining the Future*, Foreign Policy Analytics Special Report (May 2019).
[4] USGS, *supra*, note 1.
[5] *Id.*
[6] U.S. Energy Information Administration. *2018 Uranium Marketing Annual Report* (May 2019), https://www.eia.gov/uranium/marketing/pdf/umar2018.pdf.
[7] U.S. Department of Commerce. "*A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals* (June 4, 2019), https://www.commerce.gov/news/reports/2019/06/federal-strategy-ensure-secure-and-reliable-supplies-critical-minerals.
[8] Thomas Duesterberg, "*Opponents of Trade Relief for Uranium Mining Have Unconvincing Case*." Forbes (March 25, 2019). https://www.forbes.com/sites/thomasduesterberg/2019/03/25/opponents-of-section-232-relief-for-uranium-mining-relief-have- unconvincing-case/#274ce28b3f8d.
[9] Marc Humphries, *Critical Minerals and U.S. Public Policy*, Congressional Research Service (June 28, 2019).
[10] U.S. Department of Commerce, *A Federal Strategy to Ensure Secure and Reliable Supplies of Critical Minerals* (June 4, 2019), https://www.commerce.gov/sites/default/files/2020-01/Critical_Minerals_Strategy_Final.pdf.
[11] Humphries, *supra*, note 9 and World Bank Group. From Commodity Discovery to Production (September 2016), http://documents.worldbank.org/curated/en/573121473944783883/pdf/WPS7823.pdf.